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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/721,233	11/22/2000	Josef P. Debbins	390086.94529	9735	
<b>7</b> :	590 07/21/2003				
Terri S. Flynn			EXAMINER		
Quarles and Brady LLP 411 East Wisconsin Avenue Milwaukee, WI 53202		•	GUBIOTTI, MATTHEW P		
		•	ART UNIT	PAPER NUMBER	
			2124	4	
			DATE MAILED: 07/21/2003	, /	

Please find below and/or attached an Office communication concerning this application or proceeding.

				<u> </u>	<u> P2L</u>			
Office Action Summary		Application N	o.	Applicant(s)	- 11 -			
		09/721,233		DEBBINS ET AL.				
		Examiner		Art Unit				
		Matthew Gubi		2124				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE N - Exten after 3 - If the - If NO - Failur - Any re	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing d patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, ho within the statutory r ill apply and will expi cause the application	wever, may a reply be tim ninimum of thirty (30) days re SIX (6) MONTHS from n to become ABANDONEI	ely filed swill be considered timely. the mailing date of this com O (35 U.S.C. § 133).	munication,			
1)⊠	Responsive to communication(s) filed on 22 A	lovember 2000						
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ Thi	s action is non	-final.					
3) 🗌	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
· ·	on of Claims  Claim(s), 1.10 is/are pending in the application							
•	Claim(s) 1-19 is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
·	5) Claim(s) is/are allowed.							
·	6)⊠ Claim(s) <u>1-19</u> is/are rejected.							
· · · · ·	Claim(s) is/are objected to.		<b>-</b>					
-	Claim(s) are subject to restriction and/or on Papers	election requi	ement.					
9)□ T	The specification is objected to by the Examiner	•						
10)⊠ The drawing(s) filed on <u>22 November 2000</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12)☐ The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
14) 🗌 A	cknowledgment is made of a claim for domestic	priority under	35 U.S.C. § 119(e	) (to a provisional a	pplication).			
`	☐ The translation of the foreign language procent cknowledgment is made of a claim for domestic							
Attachment	•	-						
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4) [ 5) [ 6) [		(PTO-413) Paper No(s). atent Application (PTO-				
S. Patent and Tra TO-326 (Rev		ion Summary		Part of Paper No. 4				

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#### DETAILED ACTION

1. Claims 1-19 are pending in this action.

#### Drawings

2. The drawings are objected to because they contain copy marks and hand written comments (See e.g. Figure 3). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 2, 5, 6, 13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (U.S. Pat. 5,850,548) (hereafter Williams) and Vassallo et al. (U.S. Pat. No. 6,157,194) (hereafter Vassallo).

#### Claims 1 and 13

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Williams teaches an application development system substantially as claimed ("Visual Development Environment"; See Abstract;) comprising:

"a memory..." Williams teaches a system comprising memory on which to store computer-readable instructions (fig.1, refs 101, 102 and 109).

"a workstation..." Williams teaches a system comprising a workstation having a display, an input device and a processor programmed to perform application development (fig.1, refs. 106, 105 and 101; col.4, li.25-39).

"a component library..." Williams teaches a library (col.9, li.40-51; fig.5C) of software components written in an object-oriented programming language (col.5, li.38-41).

"a visual component..." Williams teaches an assembler for allowing users to select components in a framework area and assemble them in a workplace area to form an application program (fig.5C; col.9, li.14-38).

Williams teaches a system for developing task-driven applications for computer-controlled devices (col.1, li.14-23). Williams does not expressly teach developing software for a medical imaging system. Vassallo teaches a software control system for a magnetic resonance imaging (MRI) device (See Abstract; col.1, li.56 to col.2, li.3). At the time of the

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invention, the use of MRI devices for medical applications was well-known in the art, as illustrated in Vassallo (col.4, li.3-10). Furthermore, at the time of the invention it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Vassallo into the system of Williams. The modification would have been obvious because one of ordinary skill would have been motivated to utilize visual software development techniques employing reusable components in developing control systems for medical imaging devices. This modification would reduce the need for technical proficiency in building software applications and allow for the rapid development and refinement of task-driven software applications, as taught by Williams (col.1, li.44-57) and suggested by Vassallo (col.1, li.56-62).

## Claims 2 and 5

Williams further teaches wherein the assembler displays a properties area ("Component Inspector Window") and allows a user to select a component and display and modify the properties associated with the component (col.9, li.28-38; col.9, li.65 to col.10, li.2).

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## Claim 6

Williams further teaches a property that invokes a visual representation of a component in a display (col.11, li.5-16; fig.6B, ref.617).

#### Claim 15

See rejection of Claim 2.

## Claim 16

See rejection of Claim 5. It is inherent that in a computing system containing a workstation having an input device such as Williams, the input device is functional to input data into the system.

5. Claim 3, 4, 11, 12 and 14 are rejected under 35

U.S.C. 103(a) as being unpatentable over William and Vassallo as applied to claim 1 above, and further in view of Johnson ("Serialization and the JavaBeans Specification", JavaWorld, February 1998, p.1-8) (available online at:

http://www.javaworld.com/javaworld/jw-02-1998/jw-02-beans.html).

## Claims 3, 4, 11 and 12

Williams teaches the use of an object-oriented programming language (col.5, li.38-41) and the hierarchical arrangement of

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components in an application development system (col.7, li.28-42) but does not expressly teach the use of Java™ or a Java™ object serialization mechanism in developing an application using components. In the analogous art of software development, Johnson teaches the use of a Java™ object serialization mechanism to enable components to persist in a software application (p.1,  $\P$  2) (See also pp.2-3). At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Johnson into the system of Williams and Vassallo. The modification would have been obvious because one of ordinary skill would have been motivated to use a well-known programming language technique to enable the persistence of data in a software application to eliminating complexity of save and restore operations and to reduce the complexity of transferring information between computing systems.

#### Claim 14

See rejection of Claim 3.

6. Claims 7-10 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams and Vassallo as applied to claim 1 above, and further in view of McDonald et al.(U.S. Patent No. 6,053,951) (hereafter McDonald).

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## Claims 7-10

Williams teaches a property that invokes a visual representation of a component ("scroll bar") in a window on a screen containing the framework, the workspace and the properties are displayed (col.11, li.5-16; fig.6B, ref.617) (See also fig.6F, in which the multiple windows are displayed). Williams further teaches the real-time updating of properties in a display (col.9, li.59-63; col.9, li.67 to col.10, li.10) Williams but does not expressly disclose that the visual representation is a waveform displayed by a waveform plotter. In the analogous art of software development, McDonald teaches a system for graphical application development (See Abstract) in which a property window is functional to generate a waveform displayed by a waveform plotter (fig.28; col.25, li.3-9).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of McDonald into the method of Williams and Vassallo. The modification would have been obvious because one of ordinary skill would have been motivated to customize software to perform in accordance with the needs of the application. For an imaging application, it would have been obvious in the object-oriented (00) software environment of Williams to use a waveform object, displayed by a waveform plotter, to track real-time changes in a

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system. The application-independent nature of the system of Williams (col.5, li.38-41) renders its application to imaging software obvious.

## Claim 17-19

See rejection of Claims 7-10 above.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Gubiotti whose telephone number is (703) 305-8285. The examiner can normally be reached on M-F, 8-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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MPG

July 8, 2003

Todd Ingberg
Primary Examiner

**Group 2100**